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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,739	03/25/2004	John Charles Brock	ROC920030362US1	5878

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IBM CORPORATION
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EXAMINER

BONURA, TIMOTHY M

ART UNIT	PAPER NUMBER
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2114

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/808,739

Applicant(s)

BROCK ET AL.

Examiner

Tim Bonura

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-20 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/24/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- **Claims 1-8, 11-12, and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Murotani, et al, U.S. Patent Number 6,412,078.**
- **Claims 11-15 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility**
- **Claims 16-20 are allowed.**
- **Claims 9, and 10 are objected to as being dependent upon a rejected base claim.**

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
2. Claims 11-15 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility.
3. Regarding claims 11-15, the claims state a limitation of "a signal-bearing medium" that (as defined by the spec on page 11) can be constructed of the non-statutory medium of "communications medium."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8, 11-12, and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Murotani, et al, U.S. Patent Number 6,412,078.

6. Regarding claim 1:

a. Regarding the limitation of “determining whether an instruction at which an address watch breakpoint occurs is within a hardware synchronization mechanism range in a program,” Murotani disclose a system with mean to suppress a request to a port address of an I/O controller before the resulting request causes an error in the I/O controller. (Lines 9-16 of Column 2).

b. Regarding the limitation of “if the determining is true, setting a special breakpoint following the hardware synchronization mechanism range,” Murotani disclose a system with a terminating means for halting the execution of a process to and I/O controller. (Lines 35-41 of Column 2). Murotani also disclose a system wherein state information is saved. (Lines 11-18 of Column 4).

7. Regarding claim 2, Murotani disclose a system with mean for a disabling an I/O controller a failed controller and the port address and be reset by a second I/O controller. (Lines 42-50 of Column 2).

8. Regarding claim 3, Murotani disclose a system with mean for a suppressing a failed controller so that transfer to a normal controller can occur and the request to occur. (Lines 56-67 of Column 2 and Lines 1-3 of Column 2).

9. Regarding claim 4, Murotani discloses a system that can save the state information as a means for employing restore data for the system recovery. (Lines 11-18 of Column 4).

10. Regarding claim 5, Murotani disclose a system in which the state data can be used upon detecting of an error as recovery data. (Lines 11-18 of Column 4).

11. Regarding claim 6:

c. Regarding the limitation of “means for determining whether an instruction at which an address watch breakpoint occurs is within a hardware

synchronization mechanism range in a program," Murotani disclose a system with mean to suppress a request to a port address of an I/O controller before the resulting request causes an error in the I/O controller. (Lines 9-16 of Column 2).

d. Regarding the limitation of "means for setting a special breakpoint following the hardware synchronization mechanism range if the determining is true," Murotani disclose a system with a terminating means for halting the execution of a process to and I/O controller. (Lines 35-41 of Column 2).

Murotani also disclose a system wherein state information is saved. (Lines 11-18 of Column 4).

e. Regarding the limitation of "means for temporarily disabling the address watch breakpoint if the determining is true," Murotani disclose a system with mean for a disabling an I/O controller a failed controller and the port address and be reset by a second I/O controller. (Lines 42-50 of Column 2).

12. Regarding claim 7, Murotani disclose a system with mean for a suppressing a failed controller so that transfer to a normal controller can occur and the request to occur. (Lines 56-67 of Column 2 and Lines 1-3 of Column 2).

13. Regarding claim 8, Murotani discloses a system that can save the state information as a means for employing restore data for the system recovery. (Lines 11-18 of Column 4).

14. Regarding claim 11:

f. Regarding the limitation of "determining whether an instruction at which an address watch breakpoint occurs is within a hardware synchronization mechanism range in a program," Murotani disclose a system with mean to suppress a request to a port address of an I/O controller before the resulting request causes an error in the I/O controller. (Lines 9-16 of Column 2).

- g. Regarding the limitation of “setting a special breakpoint following the hardware synchronization mechanism range if the determining is true,” Murotani disclose a system with a terminating means for halting the execution of a process to and I/O controller. (Lines 35-41 of Column 2). Murotani also disclose a system wherein state information is saved. (Lines 11-18 of Column 4).
 - h. Regarding the limitation of “temporarily disabling the address watch breakpoint if the determining is true,” Murotani disclose a system with mean for a disabling an I/O controller a failed controller and the port address and be reset by a second I/O controller. (Lines 42-50 of Column 2).
 - i. Regarding the limitation of “saving a machine state if the determining is true,” Murotani discloses a system that can save the state information as a means for employing restore data for the system recovery. (Lines 11-18 of Column 4).
15. Regarding claim 12, Murotani disclose a system with mean for a suppressing a failed controller so that transfer to a normal controller can occur and the request to occur. (Lines 56-67 of Column 2 and Lines 1-3 of Column 2).
16. Regarding claim 14, Murotani discloses a system that can save the state information as a means for employing restore data for the system recovery. (Lines 11-18 of Column 4).
17. Regarding claim 15, Murotani disclose a system in which the state data can be used upon detecting of an error as recovery data. (Lines 11-18 of Column 4).

Specification

18. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Allowable Subject Matter

19. Claims 16-20 are allowed.
20. Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
21. The following is an examiner's statement of reasons for allowance:
 - j. Regarding claim 16, the prior art of record does not teach or suggest the limitation of "determining whether a processor storage reservation indicator is set after encountering an end of the hardware synchronization mechanism range."
22. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
23. The following is a statement of reasons for the indication of allowable subject matter:
 - k. Regarding claim 9, the prior art of record does not teach or suggest the limitation of "determining whether a processor storage reservation indicator is set after encountering an end of the hardware synchronization mechanism range."

Conclusion

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tim Bonura**.
 - The examiner can normally be reached on **Mon-Fri: 8:30-5:00**.
 - The examiner can be reached at: **571-272-3654**.

25. If attempts to reach the examiner by telephone are unsuccessful, please contact the examiner's supervisor, **Scott Baderman**.

- The supervisor can be reached on **571-272-3644**.

26. The fax phone numbers for the organization where this application or proceeding is assigned are:

- **703-872-9306 for all patent related correspondence by FAX.**

27. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

28. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **receptionist** whose telephone number is: **571-272-2100**.

29. Responses should be mailed to:

- **Commissioner of Patents and Trademarks**

P.O. Box 1450

Alexandria, VA 22313-1450

Tim Bonura
Examiner
Art Unit 2114

September 24, 2006

A handwritten signature in black ink, appearing to read 'Tim Bonura', with a stylized flourish extending to the right.